DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

SAS Tower

WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-029809 Address: 333 Burma Road **Date Inspected:** 13-Jul-2013

City: Oakland, CA 94607

34-0006

Project Name: SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: CWI Present: Yes No Jesus Cayabyab **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No

Component:

Yes **Delayed / Cancelled:**

Summary of Items Observed:

Bridge No:

Caltrans Quality Assurance Inspector (QA) Joe Adame arrived at the American Bridge/Fluor (ABF) job site between the times noted above in order to monitor ABF Quality Control functions and the in work being performed by ABF personnel. The following items were observed:

Tower Electroslag Welds:

The QA Inspector was present to perform Ultrasonic Testing (UT) verification on Electroslag (ESW) welds on the interior of the Tower. The purpose of the UT inspection was for the detection of planar indications utilizing both the "pulse echo" (PE) technique and the "pitch and catch" (PC) technique for further discontinuity evaluation on ESW welds. The UT inspection was performed as a joint inspection with ABF/JV Quality Control (QC) Smith Emery NDT personnel. The QA Inspector performed joint UTSW Pitch/Catch with QC Inspector Jesse Cayabyab on the items listed below.

ESW S-043 Location "T" (Face B) 80mm/100mm Thick, 70° Angle (Results below):

Y: 4020mm, X: +5

-PEUT: Ind. Lvl (A): 67, Ref. Lvl (B): 52, Att. Factor(C): 9, Ind. Rating (D): 6, SD (E): 130 -PCUT: Ind. Lvl (A): 77, Ref. Lvl (B): 52, Att. Factor(C): 16, Ind. Rating (D): 9, SPa (E): 170

Y: 4625mm, X: +5

-PEUT: Ind. Lvl (A): 63, Ref. Lvl (B): 52, Att. Factor(C): 8, Ind. Rating (D): 3, SD (E): 122 -PCUT: Ind. Lvl (A): 90, Ref. Lvl (B): 52, Att. Factor(C): 16, Ind. Rating (D): 22, SPa (E): 190 N/A

No

WELDING INSPECTION REPORT

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Y: 4260mm, X: +10

-PEUT: Ind. Lvl (A): 63, Ref. Lvl (B): 52, Att. Factor(C): 8, Ind. Rating (D): 4, SD (E): 123 -PCUT: Ind. Lvl (A): 91, Ref. Lvl (B): 52, Att. Factor(C): 16, Ind. Rating (D): 22, SPa (E): 200

Y: 7930mm, X: N/A

-PEUT: Ind. Lvl (A): Non recordable indication. -PCUT: Ind. Lvl (A): Non recordable indication.

Y: 9410mm, X: N/A

-PEUT: Ind. Lvl (A): Non recordable indication. -PCUT: Ind. Lvl (A): Non recordable indication.

ESW pitch & catch UT was performed per ABF Sup. Procedure 3 UT of ESW Groove Welds Pitch- Catch. The tandem UT report for work performed on this date will be completed by QC Inspector Jesse Cayabyab and signed by both QA/QC parties to be presented to ABF & CT METS for further review.

Summary of Conversations:

Only general conversations with ABF/JV QC NDT personnel relevant to work and testing performed during this shift.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Adame,Joe	Quality Assurance Inspector
Reviewed By:	Mertz,Robert	QA Reviewer